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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,397

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Christian Gehrman

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ERICSSON INC.  
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EXAMINER

NEURAUTER, GEORGE C

ART UNIT

PAPER NUMBER

2443

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/527,397	<b>Applicant(s)</b> GEHRMANN, CHRISTIAN	
	<b>Examiner</b> George C. Neurauter, Jr.	<b>Art Unit</b> 2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1-22 are currently presented and have been examined.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 18 August 2009 has been entered.

#### ***Response to Arguments***

Applicant's arguments filed 18 August 2009 have been fully considered but they are not persuasive.

The Applicant continues to argue that "The Examiner has failed to indicate the statutory basis of the rejection" using the Applicant's admitted prior art and that "The Examiner has failed to indicate how [the "AAPA"] teaches or suggest each and every element" in the 103 rejections. The Examiner maintains the views as put forth in the Advisory Action mailed 27 July 2009. See MPEP 2129 regarding admitted prior art rejections. Regarding the 103 rejections, the "teaching, suggestion, or motivation test" as proffered by the Applicant as a reasoning for the rejection to be withdrawn is no longer the only sufficient reasoning to establish a prima facie case of obviousness in light of the recent Supreme Court decision in *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, \_\_\_, 82 USPQ2d 1385, 1395-97 (2007), which identified a number of

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exemplary rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in *Graham v. John Deere*, which also include the teaching, suggestion, or motivation rationale. See MPEP Edition 8, Revision 7, section 2143.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments also do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. Note that in the consideration of claims in an amended case where no attempt is made to point out the patentable novelty, the claims should **not** be allowed. See MPEP 714.04. See also 37 CFR 1.111 and MPEP 714.02. Therefore, the Examiner maintains the rejections as previously put forth.

### ***Claim Rejections***

Claims 1-4, 6, 8-18, 20, and 22 are rejected in view of the Applicant's admitted Prior Art ("AAPA"). The Applicant described subject matter in the specification at page 3, lines 12-17, page 6, lines 23-29, page 21, lines 13-27, page 22, line 23-page 23, line 2, page 25, lines 5-14, page 25, line 23-page 26, line 2, and page 27, lines 4-12 that was by another, therefore, this statement is construed by the Examiner that this

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statement constitutes an admission of prior art and any subject matter associated with these statements are construed to be prior art applicable to the claims. See MPEP 2129 and *Riverwood Int'l Corp. v. R.A. Jones & Co.*, 324 F.3d 1346, 1354, 66 USPQ2d 1331, 1337 (Fed Cir. 2003).

Regarding claim 1, "AAPA" disclosed a method of providing to a client communications device by a server communications device, access to a network, the server communications device comprising a subscription module for facilitating authentication of a subscriber to the network ("module that is physically inseparable from the server communications device"; see page 9, lines 20-22), the method comprising the steps of:

establishing a communications link between the client communications device and the server communications device; and between the server communications device and the client communications device via the communications link; receiving a message by the server communications device from the client communications device via the communications link, the message being addressed to the subscription module; performing, by a processing means of the server communications device outside the subscription module, the following steps:

providing integrity protection of the received message to determine whether the received message is authentic (using "keys"); determining whether the received message is authorized to address the subscription module; and forwarding (upon a "successful" connection) the received message to the subscription module, if the processing means of the server communications device has determined the received

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message as being authentic and if the processing means of the server communications device has determined the received message as being authorized to address the subscription module; otherwise rejecting the received message ("unsuccessful"). (see at least pages 4-5 of the specification, specifically the "802.11" admitted prior art, the specification of which was filed in the 18 July 2005 IDS, specifically section 8.1)

Regarding claim 2, "AAPA" disclosed the method according to claim 1, wherein the step of providing integrity protection further comprises calculating, based on a secret session key, a respective message authentication code for each of the communicated messages; and including the calculated message authentication code into the corresponding communicated message. (see at least page 22, line 23-page 23, line 2)

Regarding claim 3, "AAPA" disclosed the method according to claim 2, wherein the step of establishing a communications link between the client and server communications devices comprises determining a secret session key based on a shared secret between the server and client communications devices. (see at least page 25, line 23-page 26, line 2)

Regarding claim 4, "AAPA" disclosed the method according to claim 3, wherein the method further comprises providing the shared secret by performing a secure pairing procedure including receiving a passcode by at least one of the client communications device and the server communications device. (see at least page 27, lines 4-12)

Regarding claim 6, "AAPA" disclosed the method according to claim 3, wherein the communications link has a secret link key related to it and the method further

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comprises providing the shared secret by calculating the shared secret using the secret link key as an input. (see at least page 25, lines 5-14)

Regarding claim 8, "AAPA" disclosed the method according to claim 1, wherein the method further comprises determining, for the messages communicated from the client communications device to the server communications device, whether the message is authorised to address the subscription module. (see at least page 3, lines 12-17 and page 7, lines 1-6 of the specification)

Regarding claim 9, "AAPA" disclosed the method according to claim 8, wherein the method further comprises: providing a shared secret between the client communications device and the server communications device; and providing an access control list stored in the server communications device in relation to at least one of the shared secret and the client communications device. (see at least page 27, lines 4-12) (note that the server specifically interacts with the client using cryptography, therefore, a strong association between the server and the client is established and the cryptographic settings used between the client and the server on the server is considered to encompass the claimed "access control list" where the server is in a generic and nominal relation to the "client communications device", therefore allowing the client access to the server based on the agreed upon cryptographic settings)

Regarding claim 15, "AAPA" disclosed the method according to claim 14, wherein the access control list is stored in a protected database. (note that cryptographic settings are essential to the security of the connection and are stored in confidence at the server and are thus considered to be "protected")

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Claims 10-12 are also rejected since these claims recite substantially the same limitations as recited in claim 1.

Claims 13 and 22 are also rejected since these claims recite substantially the same limitations as recited in claims 1 and 8 in combination.

Claim 14 is rejected since this claim recites substantially the same limitations as recited in claim 9.

Claims 16-20 are also rejected since these claims recite substantially the same limitations as recited in claims 2-6 respectively.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over “AAPA”.

Regarding claim 5, “AAPA” disclosed the method according to claim 4.



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“AAPA” did not expressly disclose wherein the passcode is at the most 48 bits long.

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to create a passcode which is at most 48 bits long, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claim 19 is also rejected since this claim recites substantially the same limitations as recited in claim 5.

Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over “AAPA” in view of US Patent 6,449,473 to Raivisto.

Regarding claim 7, “AAPA” disclosed the method according to any one of claims 2 through 6.

“AAPA” did not expressly disclose wherein the method further comprises: incorporating a value of a first counter in each of the messages communicated from the client communications device to the server communications device, the first counter being indicative of the number of messages communicated from the client communications device to the server communications device; and incorporating a value of a second counter in each of the messages communicated from the server communications device to the client communications device, the second counter being indicative of the number of messages communicated from the server communications device to the client communications device; and wherein the step of calculating a respective message authentication code for each of the communicated messages

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comprises calculating a message authentication code for each of the communicated messages and the corresponding counter value, however, Raivisto did disclose these limitations (the counter value being a “sequence number”; see at least column 3, line 66-column 4, line 26)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since Raivisto disclosed that using counter values in the calculation of the message authentication code allows for the specific advantage of recalculating the code for stronger security and to enable synchronous recalculation between the client and the server (see at least column 4, line 5-9). Therefore, based on this specific motivation and that the references are analogous to one another in the context of message security and communication security, one of ordinary skill would have been motivated to modify the teachings of “AAPA” to include the subject matter taught in Raivisto in order to arrive at a more robust and secure communication link between a client and a server.

Claim 21 is also rejected since this claim recites substantially the same limitations as recited in claim 7.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is (571)272-3918. The examiner can normally be reached on the hours between 8:30am-5:00pm Eastern.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger, can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George C Neurauter, Jr./  
Primary Examiner, Art Unit 2443